



Docket No.: M4065.0457/P457-B
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kristy A. Campbell

Application No.: 10/603,670

Group Art Unit: 2826

Filed: June 26, 2003

Examiner: Johannes P. Mondt

For: STOICHIOMETRY FOR
CHALCOGENIDE GLASSES USEFUL
FOR MEMORY DEVICES AND
METHOD OF FORMATION

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
Washington, DC 20231

Dear Sir:

Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

Those patent(s) or publication(s) which are marked with an asterisk (*) in the attached form PTO/SB/08 are not supplied because they were previously cited by or submitted to the Office in a prior application no. 09/941,544, filed August 30, 2001 and relied upon in this application for an earlier filing date under 35 U.S.C. 120.

A concise explanation of relevance of the items listed on form PTO/SB/08 is:

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☐ given for each listed item

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☐ in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references

While the information and references disclosed in this Information Disclosure Statement may be “material” pursuant to 37 CFR 1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is “prior art” for this invention unless specifically designated as such.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

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Application No.: 10/603,670

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Dated: March 29, 2003

Respectfully submitted,

By _____
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PTO/SB/08A (10-01)

Approved for use through 10/31/2002.OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/603,670		
		Filing Date	June 26, 2003		
		First Named Inventor	Kristy A. Campbell		
		Art Unit	2826		
		Examiner Name	Johannes P. Mondt		
Sheet	1	of	9	Attorney Docket Number	M4065.0457/P457-B

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA	6,388,324	05/14/2002	Kozicki et al.*	
	AB	US 2002/0000666	01/03/2002	Kozicki et al.*	
	AC	5,500,532	03/19/1996	Kozicki et al.*	
	AD	6,418,049	07/09/2002	Kozicki et al.*	
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	AF	5,789,277	08/04/1998	Zahorik et al.*	
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	AP	6,635,914	10/21/2003	Kozicki et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	BA	WO 02/21542	03/14/2002	Kozicki et al. *		
	BB	WO 00/48196	08/17/2000	Kozicki et al. *		
	BC	WO 97/48032	12/18/1997	Kozicki et al. *		
	BD	WO 99/28914	06/10/1999	Kozicki et al. *		

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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

¹ Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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				Examiner Name	Johannes P. Mondt
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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
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	CH	Angell, C.A., Mobile ions in amorphous solids, Annu. Rev. Phys. Chem. 43 (1992) 693-717. *		
	CI	Aniya, M., Average electronegativity, medium-range-order, and ionic conductivity in superionic glasses, Solid state Ionics 136-137 (2000) 1085-1089. *		
	CJ	Asahara, Y.; Izumitani, T., Voltage controlled switching in Cu-As-Se compositions, J. Non-Cryst. Solids 11 (1972) 97-104. *		
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				Group Art Unit	2826
				Examiner Name	Johannes P. Mondt
Sheet	3	of	9	Attorney Docket Number	M4065.0457/P457-B

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Sheet	4	of	9	Attorney Docket Number	M4065.0457/P457-B

	CU1	El Bouchairi, B.; Bernede, J.C.; Burgaud, P., Properties of Ag ₂ -xSe _{1+x/n} -Si diodes, Thin Solid Films 110 (1983) 107-113. *	
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	CW1	El Ghrandi, R.; Calas, J.; Galibert, G.; Averous, M., Silver photodissolution in amorphous chalcogenide thin films, Thin Solid Films 218 (1992) 259-273. *	
	CX1	El Ghrandi, R.; Calas, J.; Galibert, G., Ag dissolution kinetics in amorphous GeSe _{5.5} thin films from "in-situ" resistance measurements vs time, Phys. Stat. Sol. (a) 123 (1991) 451-460. *	
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	CH2	Fischer-Colbrie, A.; Bienenstock, A.; Fuoss, P.H.; Marcus, M.A., Structure and bonding in photodiffused amorphous Ag-GeSe ₂ thin films, Phys. Rev. B 38 (1988) 12388-12403. *	
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	CK2	Fritzsche, H., Electronic phenomena in amorphous semiconductors, Annual Review of Materials Science 2 (1972) 697-744. *	
	CL2	Gates, B.; Wu, Y.; Yin, Y.; Yang, P.; Xia, Y., Single-crystalline nanowires of Ag ₂ Se can be synthesized by templating against nanowires of trigonal Se, J. Am. Chem. Soc. (2001) currently ASAP. *	
	CM2	Gosain, D.P.; Nakamura, M.; Shimizu, T.; Suzuki, M.; Okano, S., Nonvolatile memory based on reversible phase transition phenomena in telluride glasses, Jap. J. Appl. Phys. 28 (1989) 1013-1018. *	
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CR2	Haifz, M.M.; Ibrahim, M.M.; Dongol, M.; Hammad, F.H., Effect of composition on the structure and electrical properties of As-Se-Cu glasses, J. Appl. Phys. 54 (1983) 1950-1954. *
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CH3	Jones, G.; Collins, R.A., Switching properties of thin selenium films under pulsed bias, Thin Solid Films 40 (1977) L15-L18. *
CI3	Joullie, A.M.; Marucchi, J., On the DC electrical conduction of amorphous As ₂ Se ₇ before switching, Phys. Stat. Sol. (a) 13 (1972) K105-K109. *
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CK3	Kaplan, T.; Adler, D., Electrothermal switching in amorphous semiconductors, J. Non-Cryst. Solids 8-10 (1972) 538-543. *
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